

REMARKS

This responds to the Office Action mailed on December 13, 2006.

Claim 2 is amended. Claims 7, 9, 10 and 13-22 were previously canceled. Claims 1-6, 8, 11, 12, and 23-26 are pending in this application.

Claim Objections

Claim 2 was objected to due to informalities. It is believed that the amendment made herein to claim 2 obviates said objection.

§102 Rejection of the Claims

Claim 1 was rejected under 35 USC § 102(b) as being anticipated by DePuydt et al. (U.S. 6,030,556). The Applicant respectfully traverses this rejection and requests the Office to consider the following.

“A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference.” (*Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987), M.P.E.P. §2131, 8th Ed., Rev. 4).

The **Response to Arguments** section, beginning at page 9 of the Final Office Action, states that layer 44 has qualities to promote adhesion, and cites to DePuydt. But the cap layer 50, which the Office has characterized as the equivalent of Applicant’s claimed second coating with “non-adhesive” qualities.

The problem with this characterization of the cap layer 50 is that DePuydt teaches the cap layer 50 can be of the exact same selected materials as the layer 44. Consequently, there is not difference in adhesion or non-adhesion appreciated by DePuydt. The Table illustrates Depyudt’s teaching to this effect, with the teaching for layer 44 at column 7, lines 46-58, and the teaching for layer 50 beginning at column 7, line 66 and ending at column 8, line 9.

The dielectric material 44 can be any suitable material, but examples of some suitable materials include, but are not limited to:	Examples of some suitable materials for the cap layer 50 include dielectric materials such as
aluminum oxide, silicon dioxide, yttrium oxide, silicon carbide, borosilicate glass, borophosphosilicate glass, tantalum oxide, silicon nitride, chrome oxide, nickel oxide, and combinations thereof.	aluminum oxide, silicon dioxide, yttrium oxide, silicon carbide, borosilicate glass, borophosphosilicate glass, tantalum oxide, silicon nitride, chrome oxide, nickel oxide, and combinations thereof.
The dielectric material 44 can be deposited by any suitable method, such as physical deposition (e.g., sputtering or evaporation) or chemical vapor deposition.	The cap layer 50 can be deposited by any suitable method, such as physical deposition (e.g., sputtering or evaporation) or chemical vapor deposition.
The thickness of the dielectric layer 44 is preferably about 5 nanometers to about 200 nanometers, more preferably about 10 nanometers to about 50 nanometers.	The thickness of the upper layer of cap layer 50 is preferably about 5 nanometers to about 200 nanometers, more preferably about 10 nanometers to about 50 nanometers.

DePyudt demonstrates by these utterances, that he neither teaches nor appreciates that these layers should be different in adhesive and non-adhesive qualities. Because DePyudt does not teach all the limitations of claim 1, DePyudt does not anticipate the claim. Withdrawal of the rejection is respectfully requested.

Claims 1, 11 and 23 were also rejected under 35 USC § 102(b) as being anticipated by Ohman et al. (U.S. 6,454,970). The Applicant respectfully traverses this rejection and requests the Office to consider the following.

Claim 1 requires the substrate to be “made of a first metal”, and Ohman’s substrate, item 62, is a polymer. (Ohman at col. 19, line 29). Item 3a is the article that is being impressed by the structure 7, 41, 62. Claim 11 depends from claim 1 and therefore is also not anticipated by Ohman. Withdrawal of the rejections is respectfully requested.

Claims 23 and 24 were also rejected under 35 USC § 102(b) as being anticipated by Kyminas et al. (U.S. 4,474,920). Claims 23-26 have been deleted as Applicant does not wish to pursue these claims at this time.

§103 Rejection of the Claims

Claims 2, 3, 5 and 6 were rejected under 35 USC § 103(a) as being unpatentable over DePuydt et al. in view of Ohman et al., and further in view of Imatomi (U.S. 2006/0051453 A1). Applicant respectfully traverses the rejection and requests the Office to consider the following.

To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, and not based on applicant's disclosure. *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991). (M.P.E.P. § 2143 8th Ed, Rev.4).

The Office Action admits that Depuydt "do not teach that the second and third base layer of the first coating are metal oxide and metal nitride. specifically zirconium oxide and zirconium nitride nor does DePuydt, et al. teach the thicknesses of each layer." The Office action turns to Ohman to state that Ohman teaches the use of a three-layered substrate. (*Ibid*). But neither Depuydt nor Ohman teach the basic structure set forth in claim 1 as set forth above in Applicant's traversal of the rejections under Section 102. Consequently, the combination of Depuydt and Ohman do not teach all the claim limitations. The Applicant notes this rejection included Imatori, but no reference can be found in the body of the rejection. Withdrawal of the rejection is respectfully requested.

Claims 4 and 8 were also rejected under 35 USC § 103(a) as being unpatentable over DePuydt et al. in view of Cheung et al. (U.S. 6,210,514). Applicant respectfully traverses the rejection and requests the Office to consider the following.

Cheung has to do with build-up technology, and not with embossing technology. This is clear by a cursory review of Cheung's disclosure. For example, FIGs. 7 and 8 illustrate the build-up transfer of the cantilevered element 61 from the "thin film support 65", onto the "target substrate 63". This technology monotonously taught, all the way to the end of Cheung's disclosure, such at FIG. 27, where step 127 teaches "adhesive application". Because there no motivation to combine DePydt with Cheung, and because the combination does not teach all the claim limitations, withdrawal of the rejections is respectfully requested.

Claims 12 and 25 were also rejected under 35 USC § 103(a) as being unpatentable over Ohman et al. in view of Imatomi. Applicant respectfully traverses the rejection and requests the Office to consider the following.

The Office Action admits Ohman does not teach that the coatings are comprised of zirconium and zirconium nitride, respectively. The structure in Imatomi described by the Office, however, is a weir component of a mold device. This structure, a weir, is an overflow device that does not have anything to do with the actual molding. Further, Imatomi has to do with injection molding of an article, and not with embossing. The cited references are not related in field of endeavor. Because there no motivation to combine Ohman with Imatomi, and because the combination does not teach all the claim limitations, withdrawal of the rejections is respectfully requested.

Claim 26 was also rejected under 35 USC § 103(a) as being unpatentable over Ohman et al. in view of Imatomi and further in view of Cheung et al. Applicant respectfully traverses the rejection and requests the Office to consider the following.

Applicant has demonstrated that Ohman cannot be combined with Cheung. Cheung has to do with build-up technology, and not embossing technology. Further, Applicant has demonstrated that Ohman cannot be combined with Imatomi. Further, Imatomi has to do with injection molding of an article, and not with embossing. The cited references are not related in field of endeavor. Because there no motivation to combine Ohman with either of Imatomi or Cheung, and because the combination does not teach all the claim limitations, withdrawal of the rejections is respectfully requested.

CONCLUSION

Applicant respectfully submits that the claims are in condition for allowance and notification to that effect is earnestly requested. The Examiner is invited to telephone Applicant's attorney at (801) 278-9171 to facilitate prosecution of this application.

If necessary, please charge any additional fees or credit overpayment to Deposit Account No. 19-0743.

Reservation of Rights

In the interest of clarity and brevity, Applicant may not have addressed every assertion made in the Office Action. Applicant's silence regarding any such assertion does not constitute any admission or acquiescence. Applicant reserves all rights not exercised in connection with this response, such as the right to challenge or rebut any tacit or explicit characterization of any reference or of any of the present claims, the right to challenge or rebut any asserted factual or legal basis of any of the rejections, the right to swear behind any cited reference such as provided under 37 C.F.R. § 1.131 or otherwise, or the right to assert co-ownership of any cited reference. Applicant does not admit that any of the cited references or any other references of record are relevant to the present claims, or that they constitute prior art. To the extent that any rejection or assertion is based upon the Examiner's personal knowledge, rather than any objective evidence of record as manifested by a cited prior art reference, Applicant timely objects to such reliance on Official Notice, and reserves all rights to request that the Examiner provide a reference or affidavit in support of such assertion, as required by MPEP § 2144.03. Applicant reserves all rights to pursue any cancelled claims in a subsequent patent application claiming the benefit of priority of the present patent application, and to request rejoinder of any withdrawn claim, as required by MPEP § 821.04.

Respectfully submitted,

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